SONY

4-270-482-**11**(1)

LCD
Digital Colour TV

Operating Instructions

BRAVIA

KDL-22CX32D

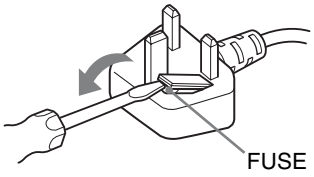
NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

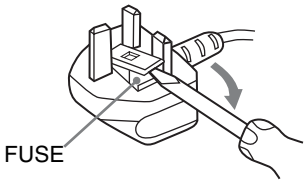
A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced with the same rating of fuse approved by ASTA or BSI to BS 1362 (i.e., marked with ⓐ or ⓑ) must be used.

When an alternative type of plug is used it should be fitted with the same rating of fuse, otherwise the circuit should be protected by a 10 AMP FUSE at the distribution board.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.





How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.
Please refer to the illustration that actually equipped with the product.

Introduction

Thank you for choosing this Sony product.

Before operating the TV, please read this manual thoroughly and retain it for future reference.

Notice for Digital TV function

- Any functions related to Digital TV (DVB) will only work in countries or areas where DVB-T (MPEG-2 and H.264/MPEG-4 AVC) digital terrestrial signals are broadcast or where you have access to a compatible DVB-C (MPEG-2 and H.264/MPEG-4 AVC) cable service. Please confirm with your local dealer if you can receive a DVB-T signal where you live or ask your cable provider if their DVB-C cable service is suitable for integrated operation with this TV.
- Your cable provider may charge a fee for their services, or require you to agree to its terms and conditions of business.
- This TV set complies with DVB-T and DVB-C specifications, but compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts are not guaranteed.
- Some Digital TV functions may not be available in some countries/areas and DVB-C cable may not operate correctly with some providers.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

- The illustration used in this manual are of the KDL-22CX32D unless otherwise state.

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  ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play DivX Video-on-Demand (VOD) content. To generate the registration code, locate the DivX VOD section in the device setup menu. Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD.
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HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

DOLBY DIGITAL PLUS

DIVX HD™

DVD VIDEO™

COMPACT disc DIGITAL AUDIO

Location of the identification label

Labels for Model No., Production Date (month/year) and Power Supply rating (in accordance with applicable safety regulation) are located on the rear of the TV or package.

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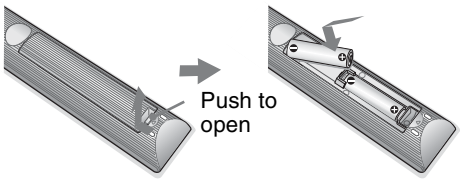
DVB : for digital channels only

• Before operating the TV, please read “Safety Information” (page 8). Retain this manual for future reference.
• Instructions about “Installing Wall Mount Bracket” are included within this TV’s instructions manual.

1: Checking the accessories

Table-Top Stand (1)
Screws for stand (7)
Remote RM-ED046 (1)
Size AA batteries (2)

To insert batteries into the remote



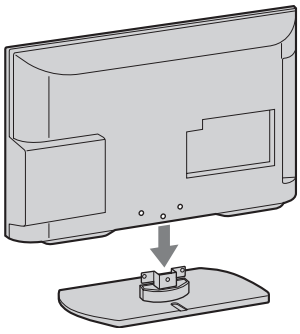
✍
- Observe the correct polarity when inserting batteries.
- Do not use different types of batteries together or mix old and new batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate the disposal of batteries. Please consult your local authority.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, a place subject to direct sunlight, or a damp room.

2: Attaching the stand

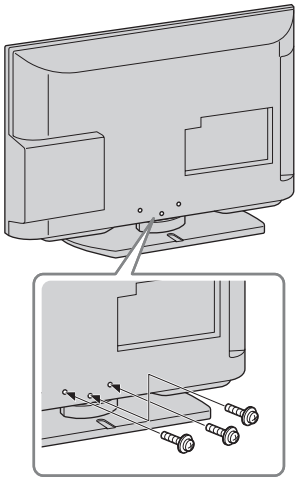
Follow the assembling steps required to place on a TV stand.

1 Refer to the supplied Table-Top Stand leaflet for proper attachment for some TV models.

2 Place the TV set on the stand. Take care not to interfere with cables.



3 Fix the TV to the stand according to the arrow marks ⬆ that guide the screw holes using the supplied screws.



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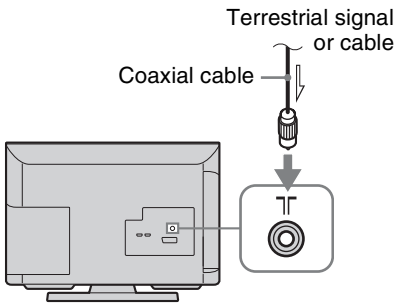
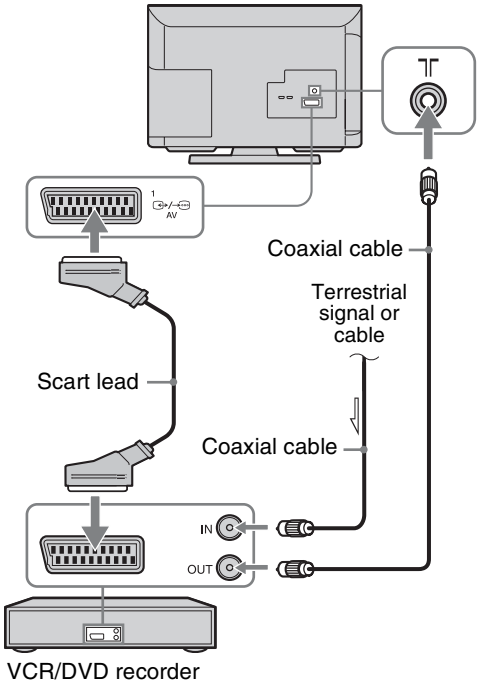
- If using an electric screwdriver, set the tightening torque at approximately 1.5 N·m (15 kgf·cm).

3: Connecting an aerial/cable/VCR/DVD recorder

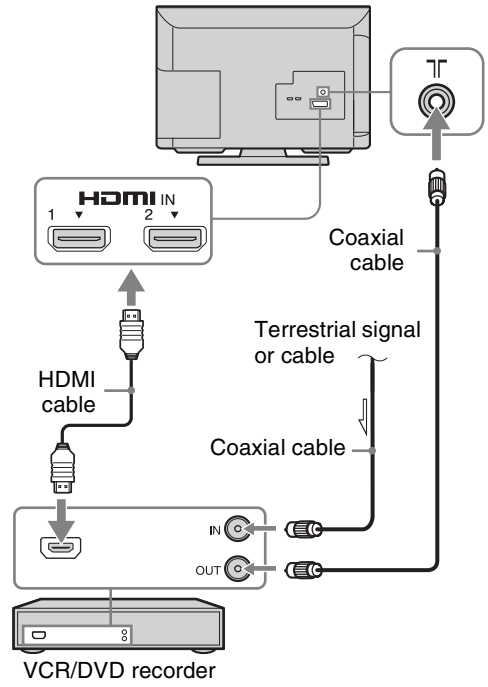
Connecting an aerial/cable only



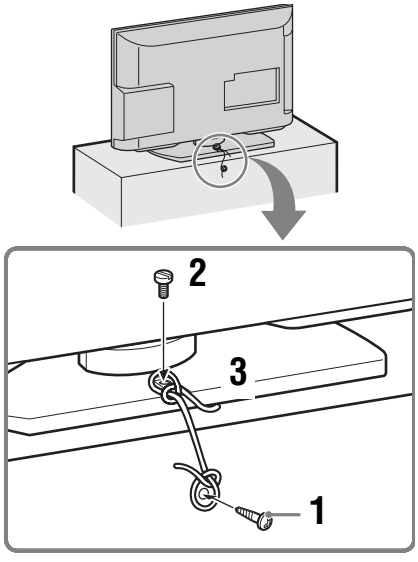
Connecting an aerial/cable/VCR/DVD recorder with SCART



Connecting an aerial/cable/VCR/DVD recorder with HDMI



4: Preventing the TV from toppling over



1 Install a wood screw (4 mm in diameter, not supplied) in the TV stand.

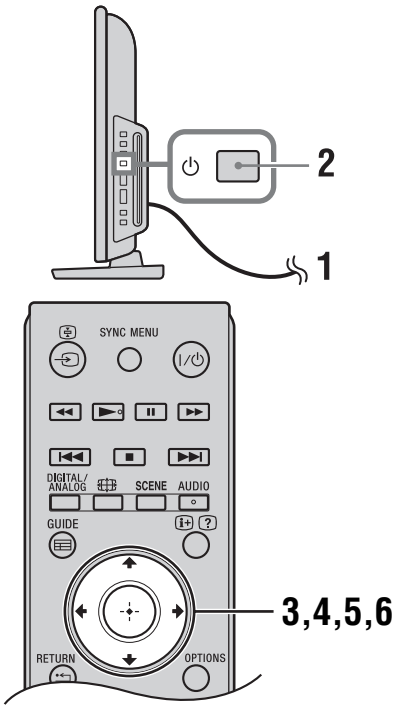
Continued

2 Install a machine screw (M4 × 16, not supplied) into the screw hole of the TV.

3 Tie the wood screw and the machine screw with a strong cord (not supplied).

- An optional Sony support belt kit is used to secure the TV. Contact your nearest Sony Service Centre to purchase a kit. Have your TV model name ready for reference.

5: Selecting the language, country/region and location

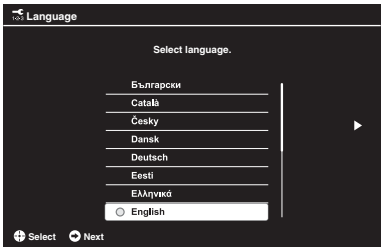


1 Connect the TV to your mains socket (220-240V AC, 50Hz).

2 Press ⏻ on the side of the TV.
When you turn on the TV for the first time, the Language menu appears on the screen.

- When you turn on the TV, the power indicator lights up in green.

3 Press ⇧/⇩/⇦/⇨ to select the language displayed on the menu screens, then press ⊕.



4 Follow the on-screen instructions to select the country/region in which you will operate the TV.
If the country/region which you want to use on the TV does not appear in the list, select "-" instead of a country/region.

5 Follow the on-screen instructions to set the PIN code.

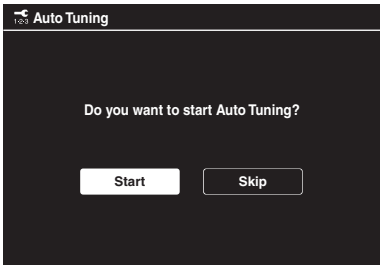
- Any PIN code can be used, except 0000. To change the PIN code later, see page 36.

6 Follow the on-screen instructions to select the location type in which you will operate the TV.
This option selects the initial picture mode appropriate for the typical lighting condition in these environments.

In Shop mode, some settings will be periodically reset for Shop usage.

6: Auto-tuning the TV

1 Press ⇦/⇨ to select "Start", then press ⊕.



2 Press ⇧/⇩ to select "Antenna" or "Cable", then press ⊕.
If you select "Cable", the screen for selecting the scan type appears. See "To tune the TV for Cable connection" (page 7). The TV then starts searching for all available digital channels, followed by all available analogue channels. This may take some time, so do not press any buttons on the TV or remote while proceeding.

If a message appears for you to confirm the aerial connection

No digital or analogue channels were found. Check all the aerial/cable connections and press ⊕ to start auto-tuning again.

3 Programme Sorting (Only in analogue mode): Changes the order in which the analogue channels are stored on the TV.

1 Press ⇧/⇩ to select the channel you want to move to a new position, then press ⇨.

2 Press ⇧/⇩ to select the new position for your channel, then press ⊕ .

If you do not change the order in which the analogue channels are stored on the TV, press **HOME** to go to next step.

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- This step will not appear if any analogue channel is found.

The message “Set-up complete” will appear on the screen. Press ⊕ .

The TV has now tuned in all the available channels.

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- USB System Update
  You can update the TV system using USB memory. Obtain information from the website below.
  http://support.sony-europe.com/TV/

To tune the TV for Cable connection

1 Press ⊕ and ⇧/⇩ to select “Quick Scan” or “Full Scan”, then press ⊕.

“Quick Scan” : channels are tuned according to the cable operator information within the broadcast signal.
Recommended setting for “Frequency” and “Network ID” is “Auto”.
This option is recommended for fast tuning when supported by your cable operator.
If the “Quick Scan” does not tune, please use the “Full Scan” method below.
“Full Scan” : All available channels are tuned and stored. This procedure may take some time.
This option is recommended when “Quick Scan” is not supported by your cable provider.

2 Press ⇩ to select “Start”.

The TV starts searching for channels. Do not press any buttons on the TV or remote.

✍

- Some cable providers do not support “Quick Scan”. If no channels are detected using “Quick Scan”, perform “Full Scan”.

Detaching the Table-Top Stand from the TV

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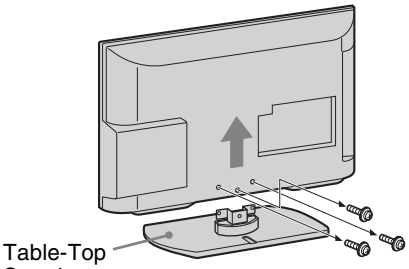
- Do not remove the Table-Top Stand for any reason other than to wall-mount the TV.



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- Be sure the TV is on the vertical position before switching on. TV set must not be powered on with LCD panel face down to avoid uneven picture uniformity.

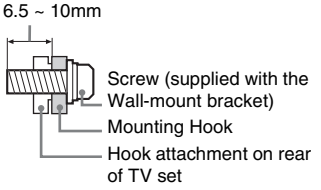
Safety Information

Installation/Set-up

Install and use the TV set in accordance with the instructions below in order to avoid any risk of fire, electrical shock or damage and/or injuries.

Installation

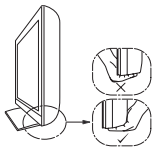
- The TV set should be installed near an easily accessible mains socket.
- Place the TV set on a stable, level surface.
- Only qualified service personnel should carry out wall installations.
- For safety reasons, it is strongly recommended that you use Sony accessories, including:
  – Wall-mount bracket SU-WL100
- Be sure to use the screws supplied with the Wall-mount bracket when attaching the mounting hooks to the TV set. The supplied screws are designed so that they are 6.5 mm to 10 mm in length when measured from the attaching surface of the mounting hook. The diameter and length of the screws differ depending on the Wall-mount bracket model. Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.



Transporting

- Before transporting the TV set, disconnect all cables.
- Two or three people are needed to transport a large TV set.
- When transporting the TV set by hand, hold it as shown in the illustration. Do not put stress on the LCD panel and the frame around the screen.

- When lifting or moving the TV set, hold it firmly from the bottom.

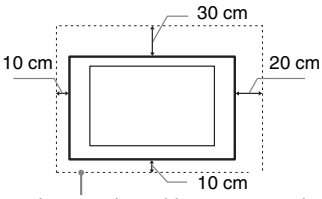


- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.

Ventilation

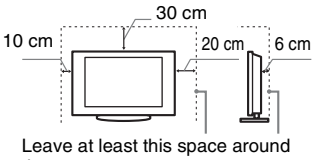
- Never cover the ventilation holes or insert anything in the cabinet.
- Leave space around the TV set as shown below.
- It is strongly recommended that you use a Sony wall-mount bracket in order to provide adequate air-circulation.

Installed on the wall



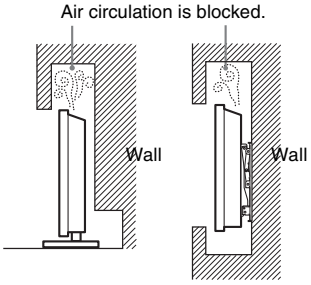
Leave at least this space around the set.

Installed with stand



Leave at least this space around the set.

- To ensure proper ventilation and prevent the collection of dirt or dust:
  – Do not lay the TV set flat, install upside down, backwards, or sideways.
  – Do not place the TV set on a shelf, rug, bed or in a closet.
  – Do not cover the TV set with a cloth, such as curtains, or items such as newspapers, etc.
  – Do not install the TV set as shown below.



Mains lead

Handle the mains lead and socket as follows in order to avoid any risk of fire, electrical shock or damage and/or injuries:

– Use only mains leads supplied by Sony, not other suppliers.
– Insert the plug fully into the mains socket.
– Operate the TV set on a 220–240 V AC supply only.
– When wiring cables, be sure to unplug the mains lead for your safety and take care not to catch your feet on the cables.
– Disconnect the mains lead from the mains socket before working on or moving the TV set.
– Keep the mains lead away from heat sources.
– Unplug the mains plug and clean it regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate, which could result in a fire.

Notes

- Do not use the supplied mains lead on any other equipment.
- Do not pinch, bend, or twist the mains lead excessively. The core conductors may be exposed or broken.
- Do not modify the mains lead.
- Do not put anything heavy on the mains lead.
- Do not pull on the mains lead itself when disconnecting the mains lead.
- Do not connect too many appliances to the same mains socket.
- Do not use a poor fitting mains socket.

Prohibited Usage

Do not install/use the TV set in locations, environments or situations such as those listed below, or the TV set may malfunction and cause a fire, electrical shock, damage and/or injuries.

Location:

- Outdoors (in direct sunlight), at the seashore, on a ship or other vessel, inside a vehicle, in medical institutions, unstable locations, near water, rain, moisture or smoke.
- If the TV is placed in the changing room of a public bath or hot spring, the TV may be damaged by airborne sulfur, etc.

Environment:

- Places that are hot, humid, or excessively dusty; where insects may enter; where it might be exposed to mechanical vibration, near flammable objects (candles, etc). The TV set shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.
- Do not place the TV in a humid or dusty space, or in a room with oily smoke or steam (near cooking tables or humidifiers). Fire, electric shock, or warping may result.

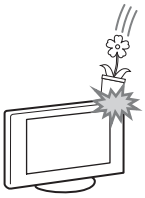
Situation:

- Do not use when your hands are wet, with the cabinet removed, or with attachments not recommended by the manufacturer. Disconnect the TV set from mains socket and aerial during lightning storms.
- Do not install the TV so that it sticks out into an open space. Injury or damage from a person or object bumping into the TV may result.

Broken pieces:

- Do not throw anything at the TV set. The screen glass may break by the impact and cause serious injury.
- If the surface of the TV set cracks, do not touch it until you have unplugged the mains lead. Otherwise electric shock may result.

- Do not subject the LCD screen to any strong impact or shock. The screen glass may crack or shatter and cause injury.



When not in use

- If you will not be using the TV set for several days, the TV set should be disconnected from the mains for environmental and safety reasons.
- As the TV set is not disconnected from the mains when the TV set is just turned off, pull the plug from the mains to disconnect the TV set completely.
- However, some TV sets may have features that require the TV set to be left in standby to work correctly.

For children

- Do not allow children to climb on the TV set.
- Keep small accessories out of the reach of children, so that they are not mistakenly swallowed.

If the following problems occur...

Turn off the TV set and unplug the mains lead immediately if any of the following problems occur.

Ask your dealer or Sony service centre to have it checked by qualified service personnel.

When:

– Mains lead is damaged.
– Poor fitting of mains socket.
– TV set is damaged by being dropped, hit or having something thrown at it.
– Any liquid or solid object falls through openings in the cabinet.

Warning

To prevent the spread of fire, keep candles or other open flames away from this product at all time.

Precautions

Viewing the TV

- View the TV in moderate light, as viewing the TV in poor light or during long period of time, strains your eyes.
- When using headphones, adjust the volume so as to avoid excessive levels, as hearing damage may result.

LCD Screen

- Although the LCD screen is made with high-precision technology and 99.99% or more of the pixels are effective, black dots may appear or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD screen and is not a malfunction.
- Do not push or scratch the front filter, or place objects on top of this TV set. The image may be uneven or the LCD screen may be damaged.
- If this TV set is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena disappear as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this TV set is in use. This is not a malfunction.
- The LCD screen contains a small amount of liquid crystal. Some fluorescent tubes used in this TV set also contain mercury. Follow your local ordinances and regulations for disposal.

Handling and cleaning the screen surface/cabinet of the TV set

Be sure to unplug the mains lead connected to the TV set from mains socket before cleaning.

To avoid material degradation or screen coating degradation, observe the following precautions.

- To remove dust from the screen surface/cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Do not spray water or detergent directly on the TV set. It may drip to the bottom of the screen or exterior parts, and may cause a malfunction.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide. Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the screen surface and cabinet material.
- Periodic vacuuming of the ventilation openings is recommended to ensure to proper ventilation.
- When adjusting the angle of the TV set, move it slowly so as to prevent the TV set from moving or slipping off from its table stand.

Optional Equipment

- Keep optional components or any equipment emitting electromagnetic radiation away from the TV set. Otherwise picture distortion and/or noisy sound may occur.
- This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection signal cable shorter than 3 meters.

Batteries

- Observe the correct polarity when inserting batteries.
- Do not use different types of batteries together or mix old and new batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate the disposal of batteries. Please consult your local authority.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, a place subject to direct sunlight, or a damp room.

Disposal of the TV set

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all

Continued

other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Safety information about built-in DVD player

- The use of optical instruments with this product will increase eye hazard. As the laser beam used in this built-in DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product.

- To keep the disc clean, handle the disc by its edge. Do not touch the surface. Dust, fingerprints, or scratches on the disc may cause it to malfunction.

- Do not use the following discs.
  - A lens cleaning disc.
  - A disc that has a nonstandard shape (e.g., card, heart).
  - A disc with a label or sticker on it.

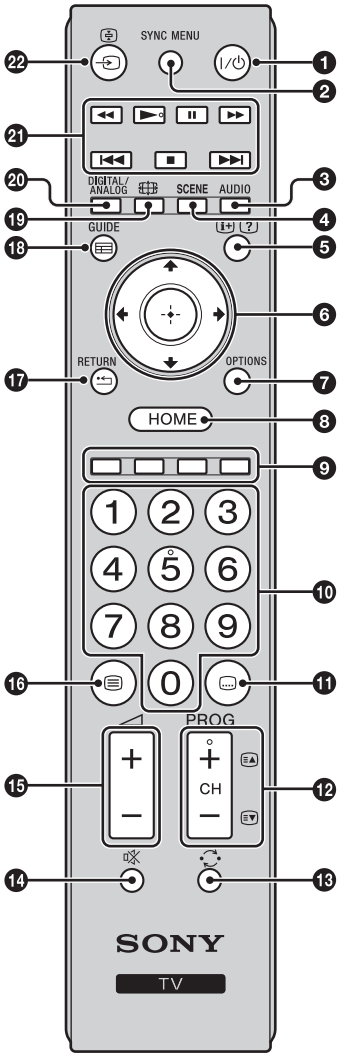
  - A disc that has cellophane tape or sticker adhesive on it.
- Do not resurface the playing side of a disc to remove surface scratches.
- When ejecting a disc from the built-in DVD player by pressing ⏏ on the TV, be sure to take out the disc from the disc slot. Do not leave the disc in the disc slot.
- Eject and take out the disc from the disc slot and turn off the TV when not using the TV.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.
- Clean the disc with a cleaning cloth. Wipe the disc from the centre out.

- Do not use solvents such as benzine, thinner, commercially available disc/lens cleaners, or anti-static spray intended for vinyl LPs.
- If you have printed the disc's label, dry the label before playing.
- If the TV is brought directly from a cold to a warm location, or is placed in a very damp room, or is placed in a room in which heating has just been turned on, moisture may condense on the surface or inside the TV. Should this occur, turn off the TV and leave the TV off until the moisture evaporates, and then the TV can be used. If a disc is inserted in the built-in DVD player, eject and take out the disc and turn off the TV. Using the TV with moisture in or on it may cause the TV to show poor picture and/or poor colour or may cause a malfunction.
- Do not force a disc into the disc slot. When there is already a disc inside the built-in DVD player, trying to insert another disc may cause malfunction.
- Sound may jump or picture distortion may occur if a lens is dirty with dust. For repair, contact the shop from which the product was purchased or a customer information service centre.
- Do not insert an unsupported disc or foreign object in the built-in DVD player, as a malfunction may result.

Precautions about built-in DVD player

- The TV has a region code located on the rear of the unit.
- Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.
- When ejecting a disc, the disc may hit objects and cause damage or injury. Keep an open space around the disc slot.
- Take out any discs from the built-in DVD player when you move the TV. If you don't, the disc may be damaged. Eject and take out the disc before moving the TV.
- Do not pull out the AC power cord (mains lead) while the built-in DVD player is playing.
- Be sure small children do not put hands into the disc slot. It may cause injury.

Overview of the remote



❶ I/⏻ – TV standby

Turns the TV on and off from standby mode.

❷ SYNC MENU

Displays the menu of connected HDMI equipment. While viewing other input screens or TV programmes, “HDMI Device Selection” is displayed when the button is pressed.

- “Control for HDMI” (BRAVIA Sync) is only available with the connected Sony equipment that has the BRAVIA Sync or BRAVIA Theatre Sync logo or is compatible with Control for HDMI.

❸ AUDIO

- Press to change the dual sound mode (page 31).
- In DVD mode: Switches between the original and dubbing languages* while playing.

❹ SCENE – Scene Select mode (page 15)

❺ ⓘ+/? – Info/Text reveal

- In digital mode: Displays brief details of the programme currently being watched.
- In analogue mode: Displays information such as current channel number and screen format.
- In DVD mode: Displays information on a title, chapter and playing time.
- In Text mode (page 15): Reveals hidden information (e.g. answers to a quiz).

❻ ⇧/⇩/⇦/⇨/⊕

❼ OPTIONS

Press to display a list that contains shortcuts to some setting menus. The listed options vary depending on the current input and content.

❽ HOME (page 28)

❾ Coloured buttons (page 15, 17)

❿ Number buttons

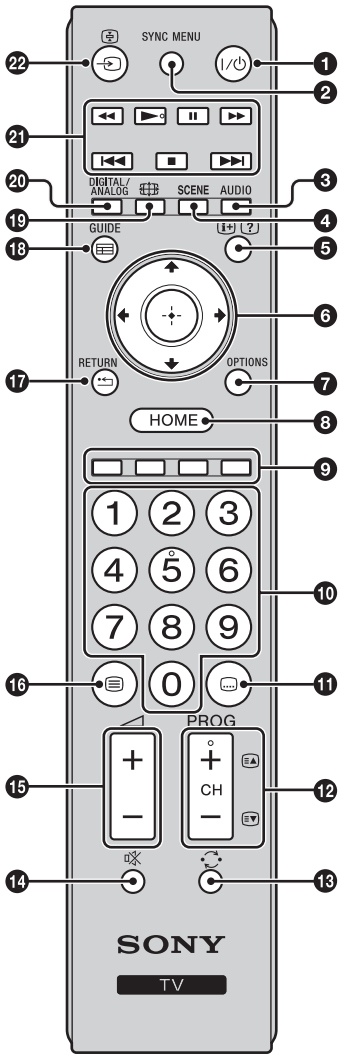
- In TV mode: Selects channels. For channel numbers 10 and above, press the second and third digit in quick succession.
- In DVD mode: Number buttons for various data. Selects a chapter or title.
- In Text mode: Enters the three digit page number to select the page.

⓫ ▭ – Subtitle setting

- Press to change the subtitle language (page 35) (in digital mode only).
- In DVD mode: Changes and displays the subtitles* of DVD while playing (page 19).

* Depends on the DVD in use.

Continued



⓬ PROG/CH +/–/▲/▼

- In TV mode: Selects the next (+) or previous (-) channel.
- In Text mode (page 15): Selects the next (▲) or previous (▼) page.

⓭ ↻ – Previous channel

Press to return to the channel that was last viewed (for more than five seconds).

⓮ 🔇 – Mute the sound

⓯ +/– – Volume

⓰ ☰ – Text (page 15)

⓱ RETURN / ↩

Returns to the previous screen of any displayed menu.

⓲ GUIDE / ▤ – EPG (Digital Electronic Programme Guide) (page 16)

⓳ ▦ – Screen mode (page 15)

⓴ DIGITAL – Digital mode (page 14)

ANALOG – Analogue mode (page 14)

㉑ BRAVIA Sync (page 27)

◀◀/►/❚❚/►►/⏮/■/⏭: You can operate the BRAVIA Sync-compatible equipment that is connected to the TV.

In DVD mode, you can operate it as follows.

►: Starts playback.

❚❚: Freezes a scene (DVD or video data). Pause audio.

■: Stops (all operations).

◀◀: Changes the speed of reverse picture search mode during playback.

►►: Changes the speed of forward picture search mode during playback.

⏮: Selects the previous title or chapter during playback.

⏭: Selects the next title or chapter during playback.

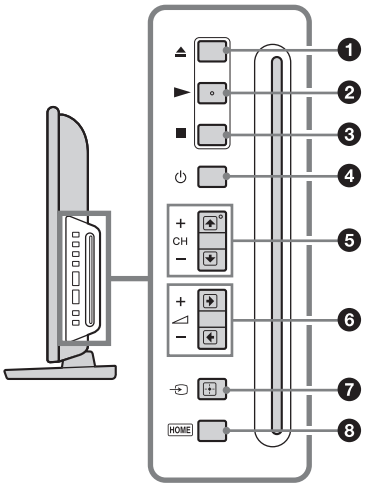
㉒ ⏻/⏻ – (Input select)

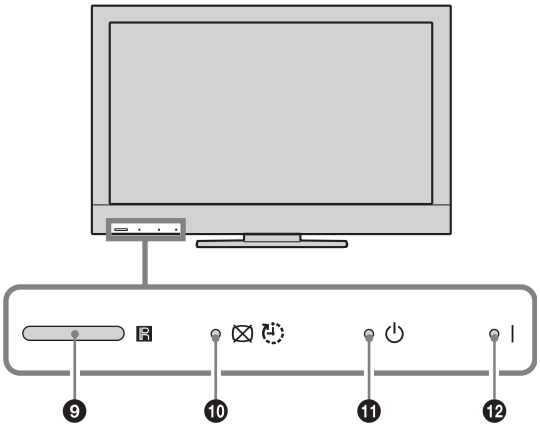
- In TV mode: Press to display a list of inputs.

💡

- The number 5, ►, **PROG/CH +** and **AUDIO** buttons have tactile dots. Use the tactile dots as references when operating the TV.

Overview of the TV buttons and indicators





❶ ⏏ – Eject

Ejects the disc.

❷ ► – Play

Starts disc playback.

❸ ■ – Stop

Stops disc playback.

❹ ⏻ – Power

Turns the TV on or off.

- To disconnect the TV completely, pull the plug from the mains.
- When you turn on the TV, the power indicator lights in green.

❺ CH +/–/↑/↓

- In TV mode: Selects the next (+) or previous (-) channel.
- In TV menu: Moves through the options up (↑) or down (↓).

❻ +/–/→/←

- In TV mode: Increases (+) or decreases (-) the volume.
- In TV menu: Moves through the options right (→) or left (←).

❼ /+ – Input select / OK

- In TV mode: Selects the input source from equipment connected to the TV sockets (page 23).
- In TV menu: Selects the menu or option, and confirms the setting.

❽ HOME (page 28)

❾ Light sensor

Do not put anything over the sensor, doing so may affect its function (page 39).

Remote control sensor

- Receives IR signals from the remote.
- Do not put anything over the sensor, as its function may be affected.

❿ ⊠ ⏲ – Picture Off / Sleep Timer indicator

- Lights up in green when the picture is switched off (page 39).
- Lights up in orange when the sleep timer is set (page 37).

⓫ ⏻ – Standby indicator

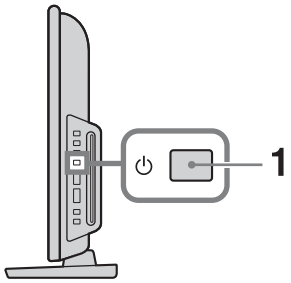
Lights up in red when the TV is in standby mode.

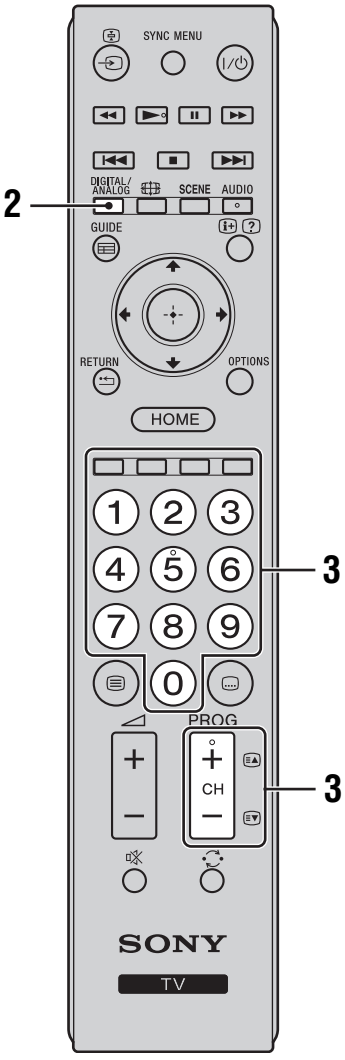
⓬ I – Power indicator

Lights up in green when the TV is turned on.

- Make sure that the TV is completely turned off before unplugging the mains lead. Unplugging the mains lead while the TV is turned on may cause the indicator to remain lit or may cause the TV to malfunction.

Watching TV





1 Press ⏻ on the side of the TV to turn on the TV.

When the TV is in standby mode (the ⏻ (standby) indicator on the TV front panel is red), press I/⏻ on the remote to turn on the TV.

2 Press **DIGITAL/ANALOG** to switch between digital and analogue modes.

The channels available vary depending on the mode.

3 Press the number buttons or **PROG/CH +/–** to select a TV channel.

To select channel numbers 10 and above using the number buttons, press the second and third digits in quick succession.
To select a digital channel using the Digital Electronic Programme Guide (EPG), see page 16.

In digital mode

An information banner appears briefly. The following icons may be indicated on the banner.

- : Radio service
- : Scrambled/Subscription service
- : Multiple audio languages available
- : Subtitles available
- : Subtitles available for the hearing impaired
- ⑱ : Recommended minimum age for current programme (from 4 to 18 years)
- : Parental Lock
- : Digital Programme Lock

Additional operations

To	Do this
Adjust the volume	Press + (increase)/ - (decrease).
Access the Programme index table (in analogue mode only)	Press ⊕ . To select an analogue channel, press ⇧/⇩, then press ⊕ .

To access Text

Press ☰. Each time you press ☰, the display changes cyclically as follows:
Text → Text over the TV picture (mix mode) → No Text (exit the Text service)
To select a page, press the number buttons or ▲/▼.
To reveal hidden information, press ?.

- When four coloured items appear at the bottom of the Text page, Fastext is available. Fastext allows you to access pages quickly and easily. Press the corresponding coloured button to access the page.

Scene Select mode

When you select the desired scene option, the optimum sound quality and picture quality for the selected scene are automatically set.

1 Press **SCENE** on the remote.

2 Press ↑/↓ to select the mode, then press ⊕.

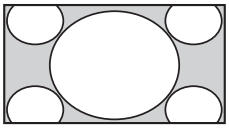
"Auto": Delivers optimum picture and sound quality which is automatically set according to input source. There may not be any effect depending on the connected equipments.
"General": Current user settings.
"Photo": Delivers picture that reproduces the texture and colour of a printed photo.
"Music": Delivers dynamic and clear sound effects like at a concert.
"Cinema": Delivers theatre-like picture and dynamic sound.
"Game": Delivers the best picture and sound quality for fullest game playing enjoyment.
"Graphics": Delivers clearer detailed pictures to reduce fatigue for prolonged viewing.
"Sports": Delivers realistic picture with surround sound like in a stadium.

- Except for "Auto", "General" and "Music", if any scene mode is selected, picture mode selection in the picture menu is not possible - release scene selection first.

To change the screen format manually to suit the broadcast

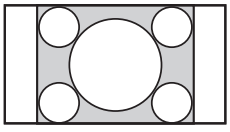
Press ▭ repeatedly to select the desired screen format.

Wide Zoom*



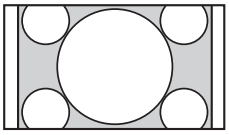
Displays conventional 4:3 broadcasts with an imitation wide screen effect. The 4:3 picture is stretched to fill the screen.

Normal



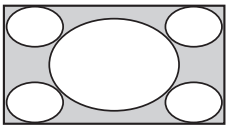
Displays conventional 4:3 broadcasts (e.g. non-wide screen TV) in the correct proportions.

14:9*



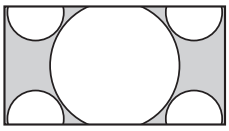
Displays 14:9 broadcasts in the correct proportions. As a result, black border areas are visible on the screen.

Full



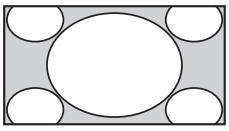
Stretches a 4:3 picture horizontally, to fill a 16:9 screen.

Zoom*



Displays cinemascopic (letter box format) broadcasts in the correct proportions.

Captions*



Displays cinemascopic (letter box format) broadcasts with subtitles on the screen.

* Parts of the top and bottom of the picture may be cut off.

- Depending on the signal, some screen formats may not be selectable.
- Some characters and/or letters at the top and the bottom of the picture may not be visible in "Wide Zoom".

- You can adjust the vertical position of the picture when selecting "Zoom", "14:9" or "Captions". Press ↑/↓ to move up or down (e.g. to read subtitles).

Using the Digital Electronic Programme Guide (EPG) DVB*

Digital Electronic Programme Guide (EPG)

1 In digital mode, press **GUIDE**.

2 Perform the desired operation as shown in the following table or displayed on the screen.

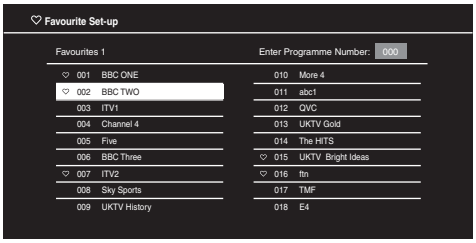
* This function may not be available in some countries/regions.

To	Do this
Watch a programme	Press ⇧/⇩/⇦/⇨ to select the programme, then press ⊕.
Turn off the EPG	Press **GUIDE**.

✍

- If an age restriction for programmes has been selected, a message asking for a PIN code will appear on the screen. For details, see “Parental Lock” on page 36.

Using the Digital Favourite list DVB*



Digital Favourite list

The Favourite feature allows you to specify up to four lists of your favourite programmes.

1 In digital mode, press **HOME**, and select “Digital Favourites”.

2 Perform the desired operation as shown in the following table or displayed on the screen.

* This function may not be available in some countries/regions.

To	Do this
Create your Favourite list for the first time	**1** Press ⊕ to select “Yes”. **2** Press the yellow button to select the Favourite list. **3** Press ⇧/⇩/⇦/⇨ to select the channel you want to add, then press ⊕. Channels that are stored in the Favourite list are indicated by a ♥ symbol. **4** Press **RETURN** to finish setting up.
Watch a channel	**1** Press the yellow button to navigate through your Favourite lists. **2** Press ⇧/⇩ to select the channel, then press ⊕.
Turn off the Favourite list	Press **RETURN**.
Add or remove channels in the currently edited Favourite list	**1** Press the blue button. **2** Press the yellow button to select the Favourite list you want to edit. **3** Press ⇧/⇩/⇦/⇨ to select the channel you want to add or remove, then press ⊕.
Remove all channels from the current Favourite list	**1** Press the blue button. **2** Press the yellow button to select the Favourite list you want to edit. **3** Press the blue button. **4** Press ⇦/⇨ to select “Yes”, then press ⊕ to confirm.

Playing a DVD

Getting ready

1 Press ⏻ on the TV, or I/⏻ on the remote to turn on the TV.

The Standby indicator on the front panel of the TV changes to green from red.

2 Press ⏎ to select the DVD mode.

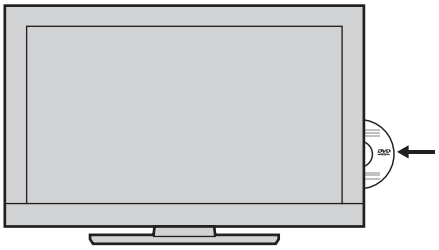
The input source menu appears on the screen.

3 Press ⇧/⇩ to select DVD, then press ⊕ to confirm.

Your TV will switch to the DVD mode.

Inserting a disc

1 Hold the disc with the printed side facing you, and push it lightly into the disc bay until it is taken in automatically. Please see following illustration:



- DVD playback starts automatically.
- If ⃠ appears on TV, the currently-selected function cannot be used with the disc.
- Enter the DVD mode in the following way.
  - Press ⏎/⊞ to select DVD input.
  - Press **HOME** and select "DVD".
  - Insert the disc.
  - Press ►. (Only when BRAVIA Sync is not activated.)

- Insert the disc halfway, and it will automatically be inserted in the disc bay.
- Do not push or pull an inserted disc, as malfunction or damage may result.
- Do not insert an unsupported disc or foreign object into the disc bay, as a malfunction may result.

Ejecting a disc

1 Press ⏏ on the side panel of the TV. Remove the disc.

Playing a DVD

Playing a title

1 After the DVD is read, playback starts automatically.

- Depending on the DVD in use, you may be required to select a title or chapter from the DVD content.

2 Press ❚❚ to pause playback.

3 Press ► or ❚❚ to resume playback.

4 Press ■ to stop playback.

Displaying information

1 Press ⊞/? to view the information line.

2 Press ⊞/? to hide the information line.

Selecting a title or chapter through the DVD menu

DVD contains various titles and chapters that you may select. The number of titles or chapters on the DVD is displayed in the information item next to the title and chapter indicator.

1 Press **OPTIONS** and select "Top Menu" to open the DVD content.

The DVD's title menu (if any) appears on the screen.

2 Press ⇧/⇩ or ⇦/⇨ to select a title or chapter, then press ⊕ to start playback.

3 Playback starts from the selected title/ chapter.

Selecting a title or chapter through the Info menu

This function depends on the DVD in use.

1 Press the number buttons to display the title/chapter selection screen during playback.

2 Press ⇦/⇨ to select a title or chapter.

3 Press the number buttons to enter the title or chapter number.

4 Playback starts with the selected title or chapter number.

Step-by-step chapter selection

1 Press ▶▶I to select the next chapter during playback.

2 Press I◀◀ to select the previous chapter during playback.

Pausing or resuming playback

You can pause or resume playback of a DVD as desired.

1 Press ■ once to pause playback.

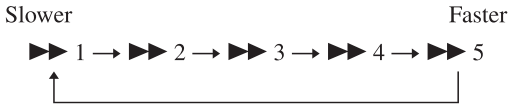
2 Press ► or ❚❚ to resume playback.

3 Playback resumes from the point it was paused.

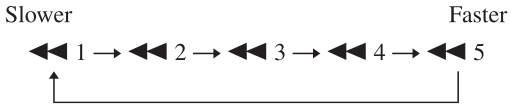
Searching for a point in a disc

Press ◀◀ or ▶▶ during playback. When you find the point you want, press ► to return to normal speed. Each time you press ◀◀ or ▶▶ during scan, the scan speed changes. With each press the indication changes as shown below. Actual speeds may differ between discs.

Playback direction



Opposite direction

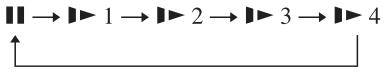


Slow forward and slow reverse

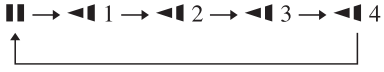
You can slow play by pressing ◀◀ or ▶▶ in pause mode.

Each time you press ◀◀ or ▶▶ during slow play, the playback speed changes. Four speeds are available. With each press the indication changes as follows:

Playback direction



Opposite direction (DVD only)



The "❚► 4"/"◄❚ 4" playback speed is slower than "❚► 1"/"◄❚ 1".

Switching the dubbing language or audio format

Use this setting to change the preset dubbing language if the DVD contains alternatives.

1 Press **AUDIO** during playback.

For example, the following information, which indicates the current dubbing language, appears on the screen briefly:

Audio 1/4: Dolby Digital 3/2.1 CH English

"Audio 1/4" in the above example indicates that the first of the 4 dubbing languages is selected. "Dolby Digital 5.1ch" indicates that the audio format is Dolby Digital.

2 Press **AUDIO** repeatedly to select the dubbing language.

✍
- A DVD's structure may prevent you from changing the audio language. In this case, you can generally make the setting from the DVD menu.

Selecting and displaying subtitles

If a DVD contains subtitles, they can be displayed on the screen. If there are subtitles in multiple languages, you can select the desired language.

1 Press 💬 during playback.

For example, the following information, which indicates the current subtitle language, appears on the screen briefly:

Subtitle 01/05 German

2 Keep pressing 💬 to select the subtitle language.

✍
- To turn the subtitles off, press 💬 repeatedly until "Subtitle Off" appears on the screen.
- Switching between subtitle languages may be prevented by the DVD's own structure. In this case, you can generally make the setting from the DVD menu.

Camera angle selection for certain scenes and passages

Some DVDs contain scenes or passages shot from different camera angles. You can select one of these different angles.

1 Press **OPTIONS** and select "Angle" during playback.

2 Press ⊕ with "Angle" selected to select another camera angle.

Continued

S-VCD/VCD Playback

PBC (playback control)

This is the navigation option for PBC, S-VCD/VCDs. PBC information is stored in the disc at the factory.
PBC is activated when it is ready for delivery. PBC and channel information in the S-VCD/VCD indicate the navigation options.

To activate PBC

Press ■ twice, then press ► to start playback.

To deactivate PBC

Press number buttons to select the title during playback.

- While PBC is on, press **OPTIONS** and select "Top Menu" to display the PBC navigation on the screen.

Playing Sound/Picture Data

Playing Picture CD

1. Insert CD containing picture data to the TV, and the file browser appears automatically.
2. Press ⇧/⇩ to select the directory, then press ⊕ to open it.
   The subdirectory list appears on the screen.
3. Press ⇧/⇩ to select the picture.
4. Press ⊕ or ► to display the picture.
5. Press ■ to end playback.

- If you press ► during playback, the screen changes to the slideshow.
  Press ■ to stop the slideshow, and press again to return to the file browser.

Rotating the picture

Pictures can be rotated 90°.

1. Press ⇦ or ⇨ to rotate pictures 90° during playback.

Flipping the picture

Pictures can be flipped.

1. Press ⇧ or ⇩ to flip pictures during playback.

Playing audio data

1. Insert CD containing audio data to the TV, and the file browser appears automatically.
2. Press ⇧/⇩ to select the directory, then press ⊕ to open it.
   The subdirectory list appears on the screen.
3. Press ⇧/⇩ to select the title.
4. Press ⊕ or ► to start playback.
5. Press ❚❚ to pause playback.
6. Press ► or ❚❚ to resume playback.
7. Press ►►| to select the next title, or |◄◄ to select the previous title.
   or
   Press the number buttons to enter the title number, then press ⊕ to start playback.
8. Press ■ to end playback.

Enjoying Karaoke

Using Karaoke

You can enjoy karaoke by setting this TV to karaoke mode. You can connect a microphone (not supplied) to the TV.

✍
- When the input source is TV or USB photo/music/video, karaoke cannot be used.
- The voice input from microphone is not output from the audio output jacks of the TV or Sony/Phillips Digital Interface. Neither “Key Change” or “Vocal Reducer” (page 32) are applied to the audio output signal.
- When karaoke is used, video and audio from Scart connection cannot be output.

1 Connect the microphone to the side panel of the TV.

2 Select the input source except TV and USB.

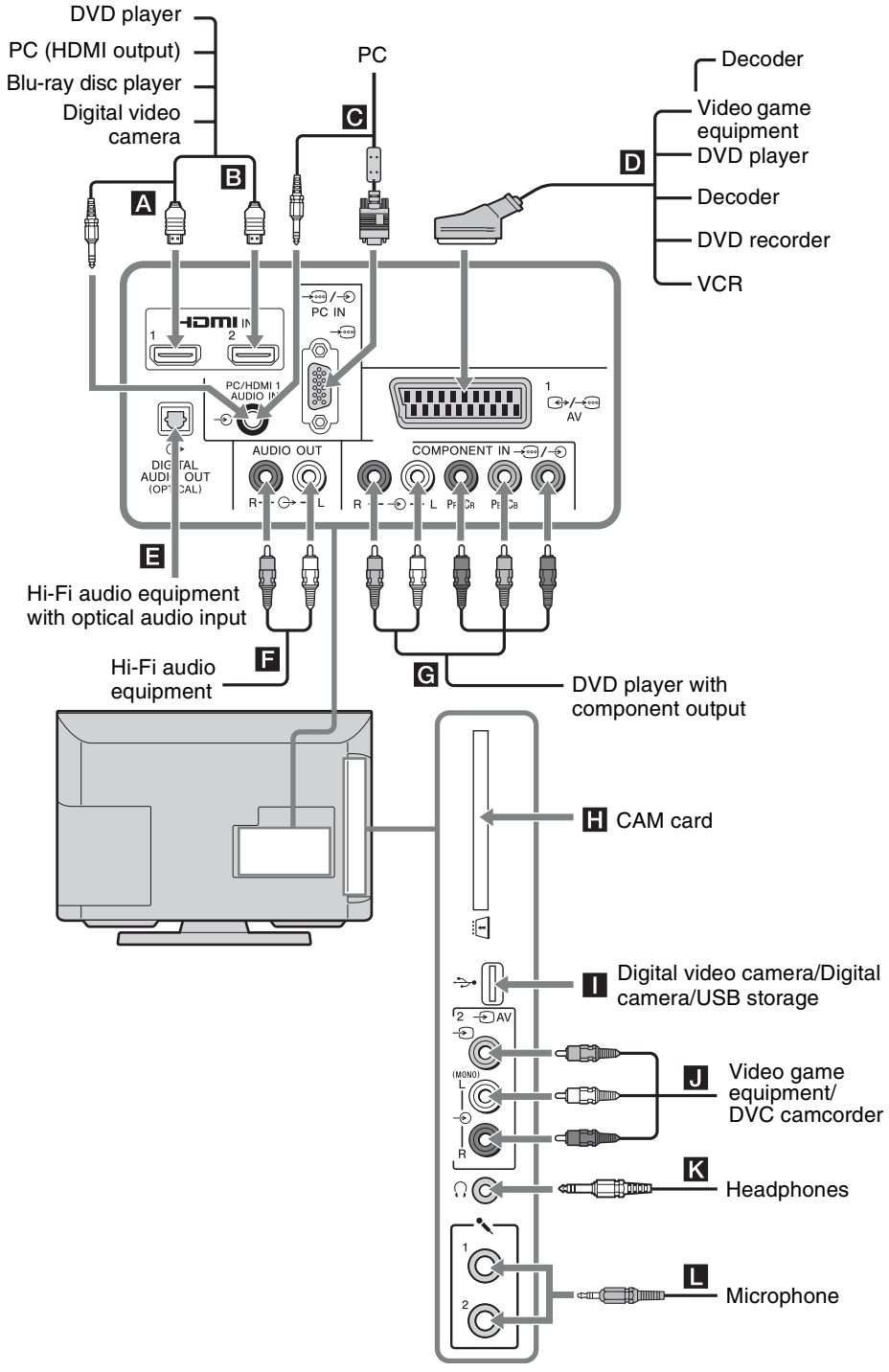
3 Press **HOME** and select “Karaoke”.

4 Set the Karaoke mode to “On” (page 32).

✍
- Do not bring the microphone close to TV as howling may result.
- During a thunderstorm, stop the karaoke function and disconnect the microphone.
- Do not output sound beyond the ratings of the TV. If you input a loud voice, the sound may be distorted.
- If you do not use the karaoke function, set it to “Off”. Otherwise, noise may be input from the microphone.
- The Vocal Reducer function may not be effective depending on the source. If you use Karaoke DVD/CD, set “Vocal Reducer” to “Off” (page 32).

Connecting optional equipment

You can connect a wide range of optional equipment to your TV. Connecting cables are not supplied.



Viewing pictures from connected equipment

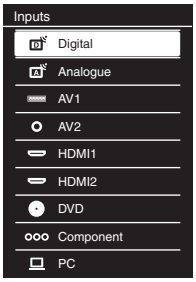
Turn on the connected equipment, then perform one of the following operation.

For an auto-tuned VCR page 6

In analogue mode, press **PROG/CH +/–**, or the number buttons, to select the video channel.

For other connected equipment

Press ⏎ to display the connected equipment list. Press ⇧/⇩ to select the desired input source, then press ⊕. (The highlighted item is selected if two seconds pass without any operation after pressing ⇧/⇩.)



For a USB device

See page 24.

Symbol on the screen	Description
Component	To see the equipment connected to **G**.
HDMI1 or HDMI2	HDMI IN 1 or HDMI IN 2 To see the equipment connected to **A** or **B**. Digital video and audio signals are input from the connected equipment. If the equipment has a DVI socket, connect the DVI socket to the HDMI IN 1 socket through a DVI-HDMI adaptor interface (not supplied), and connect the equipment's audio out sockets to the audio in sockets in the HDMI IN 1 sockets. Connect to the HDMI IN 2 socket, to view photographs or screen images from a PC or digital video camera.
AV1	To see the equipment connected to **D**.
PC	To see the equipment connected to **C**. • It is recommended to use a PC cable with ferrites like the "Connector, D-sub 15" (ref. 1-793-504-11, available in Sony Service Centre), or equivalent.
AV2	To see the equipment connected to **J**. When connecting mono equipment, connect to the ⏎ AV2 L socket.

✍
- Be sure to use only an authorised HDMI cable bearing the HDMI logo. We recommend that you use a Sony HDMI cable.
- When HDMI control compatible equipment is connected, communication with the connected equipment is supported. Refer to page 27 to set up this communication.

To connect	Do this
Conditional Access Module (CAM) **H**	To use Pay Per View services. For details, refer to the instruction manual supplied with your CAM. Turn off the TV when inserting or removing your CAM. ✍ • CAM is not supported in some countries/regions. Check with your authorised dealer.
USB **I**	You can enjoy photo/music/video files stored in a Sony digital still camera or camcorder (page 24).
Hi-Fi audio equipment **F**	Connect to the audio output sockets ⏎ to listen to the sound from the TV on Hi-Fi audio equipment. Audio level of the external speakers can be modified by pressing the volume buttons on the remote.
DIGITAL AUDIO OUT (OPTICAL) **E**	Use an optical audio cable.
∩ **K**	Connect to the ∩ socket to listen to sound from the TV on headphones.
L	Connect a microphone to the socket to enjoy the karaoke function.

Continued

Additional operation

To	Do this
Return to normal TV mode	Press **DIGITAL/ANALOG**.

Playing Back Photo/Music/ Video via USB

You can enjoy photo/music/video files stored in a Sony digital still camera or camcorder through a USB cable or USB storage device on your TV.

1 Connect a supported USB device to the TV.

2 Press **HOME**.

3 Press ⇧/⇩ to select “Photo”, “Music”, or “Video”, then press ⊕.

The file or folder list appears.

4 Press ⇧/⇩/⇦/⇨ to select a file or folder, then press ⊕.

When you select a folder, select a file, then press ⊕.

Playback starts.

✍

- Picture quality may appear coarse when using “Photo” because images may be enlarged depending on the file. Also, images may not fill the entire screen depending on the image size and aspect ratio.
- Some photo files may take some time to be displayed when using “Photo”.
- The file name and folder name support the UTF-8 character set.
- While the TV is accessing the data on the USB device, observe the following:
  – Do not turn off the TV or connected USB device.
  – Do not disconnect the USB cable.
  – Do not remove the USB device.

  The data on the USB device may be damaged.
- Sony will not be held liable for any damage to, or loss of, data on the recording media due to a malfunction of any connected devices or the TV.
- When you connect a Sony digital still camera, set the camera’s USB connection mode to Auto or “Mass Storage”. For more information about USB connection mode, refer to the instructions supplied with your digital camera.
- USB Photo Viewer supports FAT16 and FAT32 file systems.
- BRAVIA TV supports DivX® (not available for DVD).
- Up to 300 files per folder are supported.
- Depending on the exact file specifications, some files, including those modified on a PC, cannot be played even if the file format is supported.
- Check the website below for updated information about compatible USB devices.
  http://support.sony-europe.com/TV/compatibility/

Basic operation of Photo/Music/Video

You can operate the connected USB device by the TV remote.

Item	Description
◀◀ / ▶▶	Fast reverses/fast forwards the file when pressed during playback.
⏮ / ⏭	Goes to the beginning of the previous/ next file.
▶	Starts playback.
⏸	Pauses playback.
■	Stops playback.

To use playback options

Press the coloured buttons to display a list that contains shortcuts to some setting menus. The listed options vary depending on the current input and content.

Photo

"Slideshow Effect": Selects an effect for a slideshow.
"Slideshow Speed": Selects the slideshow duration.
"Shuffle": Plays a file in random order.
"Zoom": Magnifies the picture ("1×", "2×" or "4×")

Music

"Playback Target": Selects to play all files, or one selected file.
"Shuffle": Plays files in random order.
"Speakers": Selects a speaker (page 31).

Video

"Playback Target": Selects to play all files, or one selected file.
"Zoom"*: Magnifies the picture ("1×", "2×", "4×" or "Full")
"Speakers": Selects a speaker (page 31).
* When you set "Zoom", stop video playback.

General

"Repeat": Plays a file repeatedly.
"Sort By": Changes file order
"Device Selection": Selects a USB device.

To set the picture (Video)

You can adjust the picture quality of USB Video.

1 Select a video.

See "Playing Back Photo/Music/Video via USB" (page 24).

2 Press **OPTIONS** during playback, then press ⇧/⇩ to select "Picture" and press ⊕.

3 Press ⇧/⇩/⇦/⇨ to select the item, then press ⊕.

4 Press ⇧/⇩/⇦/⇨ to adjust the setting, then press ⊕.

To play a photo as a slideshow (Photo)

You can play a slideshow with photos. "Slideshow Effect" and "Slideshow Speed" can be set.

1 Select a photo.

See "Playing Back Photo/Music/Video via USB" (page 24).

2 Press the green button in thumbnail view, or press **OPTIONS** while a photo is displayed, then press ⇧/⇩ to select "Slideshow" and press ⊕.

To stop a slideshow

Press ⮌ **RETURN** or **HOME**.

Continued

USB Video format

Extension	Container	Video Codec	Audio Codec
.avi	AVI	DivX 3.11/4.x/5.1	PCM / MPEG1 Layer1, 2 / MP3 / MPEG2 AAC (2ch) / MPEG4 AAC (2ch) / MPEG4 HE-AAC (2ch) / Dolby Digital (2ch) / WMA v8
		XviD	
		MPEG1	
		MPEG2 MP	
		H.264 BP/MP/HP	
		MPEG-4 SP/ASP	
.wmv .asf	ASF	WMV v9	MP3 / WMA v8
		DivX 3.11	
		XviD	
		MPEG-4 SP/ASP	
		VC-1	
.mp4 .mov .3gp	MP4	H.264 BP/MP/HP	MPEG1 Layer1, 2 / MP3 / MPEG2 AAC / MPEG4 AAC / MPEG4 HE-AAC
		MPEG-4 SP/ASP	
		H.263	
.mkv	MKV	H.264 BP/MP/HP	PCM / MPEG1 Layer1, 2 / MP3 / MPEG2 AAC (2ch) / MPEG4 AAC (2ch) / MPEG4 HE-AAC (2ch) / Dolby Digital (2ch) / WMA v8
		MPEG-4 SP/ASP	
		WMV v9	
		DivX 3.11/4.x/5.1	
		VC-1	
.mpg .mpeg .vob	PS	MPEG1	MPEG1 Layer1, 2 / MP3 / Dolby Digital (2ch)
		MPEG2 MP	
.ts, .m2ts	TS	MPEG2 MP	MPEG1 Layer1, 2 / MP3 / MPEG2 AAC / MPEG4 AAC / MPEG4 HE-AAC
		VC-1	
		H.264 BP/MP/HP	

USB Music format

Extension	Audio Codec
.mp3	MP3
.wma	WMA v8

USB Photo format

Extension	Image Codec
.jpg, .jpeg	JPEG

DCF2.0 or EXIF2.21 supported.

✍

- Playback of the above file formats is not guaranteed.

Using BRAVIA Sync with Control for HDMI

The Control for HDMI function enables the TV to communicate with the connected equipment that is compatible with the function, using HDMI CEC (Consumer Electronics Control).
For example, by connecting Sony equipment that is compatible with Control for HDMI (with HDMI cables), you can control them together. Be sure to connect the equipment correctly, and make the necessary settings.

Control for HDMI

- Automatically turns the connected equipment off when you switch the TV to standby mode using the remote.
- Automatically turns the TV on and switches the input to the connected equipment when the equipment starts to play.
- If you turn on a connected audio system while the TV is on, the sound output switches from the TV speaker to the audio system.
- Adjusts the volume (**+/–**) and mutes the sound () of a connected audio system.
- You can operate the connected Sony equipment that has the BRAVIA Sync logo by the TV remote by pressing:
  - **◀◀/►/II/▶▶/I◀◀/■/▶▶I** to operate the connected equipment directly.
  - **SYNC MENU** to display the menu of the connected HDMI equipment on the screen.
    After displaying the menu, you can operate the menu screen by using ⇧/⇩/⇦/⇨, ⊕, colour buttons, and **RETURN**.
    - Select “Device Control”, then select the desired option to operate the equipment.
    - Refer to the instruction manual of the equipment for available control.
    - Select “TV Control” to open the TV Menu or TV options menu.
- If “Control for HDMI” of the TV is set to “On”, “Control for HDMI” of the connected equipment is also automatically switched to “On”.

To connect the equipment that is compatible with Control for HDMI

Connect the compatible equipment and the TV with an HDMI cable. When connecting an audio system, be sure to also connect the DIGITAL AUDIO OUT (OPTICAL) jack of the TV and the audio system using an optical audio cable (page 22).

To make the Control for HDMI settings

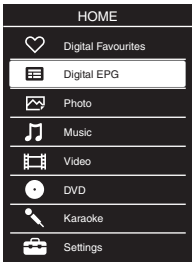
The Control for HDMI settings must be set on both the TV side and connected equipment side. See “HDMI Set-up” page 37 for the TV side settings. For settings on the connected equipment, refer to the operating instructions for that equipment.

Using MENU Functions

Navigating through TV Menu

"MENU" allows you to enjoy various convenient features of this TV. You can easily select channels or inputs sources and change the settings for your TV.

1 Press **HOME**.



2 Press ⇧/⇩ to select an option, then press ⊕.
To exit the menu, press **HOME**.

Media category icon		Description
	Digital Favourites	You can select the Digital Favourite list (page 17).
	Digital EPG	You can select the Digital Electronic Programme Guide (EPG) (page 16).
	Photo	You can enjoy photo files via USB devices (page 24).
	Music	You can enjoy music files via USB devices (page 24).
	Video	You can enjoy video files via USB devices (page 24).
	DVD	Plays a disc inserted in the TV (page 18).
	Karaoke	You can enjoy karaoke (page 21).
	Settings	You can make advanced settings and adjustments (page 29).

- The options you can adjust vary depending on the situation.
- Unavailable options are greyed out or not displayed.

Settings

Picture

Picture Mode	Selects the picture mode. **"Vivid":** For enhanced picture contrast and sharpness. **"Standard":** For standard picture. Recommended for home entertainment. **"Custom":** Allows you to store your preferred settings. **"Cinema":** For film-based content. Suitable in a theatre-like environment. **"Photo":** For standard viewing of photographs. **"Sports":** Optimises picture quality for viewing sports. **"Game":** For standard picture suitable for games. **"Graphics":** Optimises picture quality for viewing graphics. ✍ • "Picture Mode" is set depending on "Scene Select" settings.
Reset	Resets all "Picture" settings except "Picture Mode" to the factory settings.
Backlight	Adjusts the brightness of the backlight. ✍ • Reducing the brightness of the screen, the power consumption will be reduced.
Contrast	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Colour	Increases or decreases colour intensity.
Hue	Increases or decreases the green tones and red tones. 💡 • "Hue" can only be adjusted for an NTSC colour signal (e.g., U.S.A. video tapes).
Sharpness	Sharpens or softens the picture.
Colour Temperature	Adjusts the whiteness of the picture. **"Cool":** Gives the white colours a blue tint. **"Neutral":** Gives the white colours a neutral tint. **"Warm":** Gives the white colours a red tint.
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal. **"Auto/High/Medium/Low":** Modifies the effect of the noise reduction. **"Off":** Turns off the "Noise Reduction" feature.
MPEG Noise Reduction	Reduces the picture noise in MPEG-compressed video.

Continued

Film Mode	Provides improved picture movement when playing DVD or VCR images taken on film, reducing picture blur and graininess. **"Auto":** Provides the original film-based content as is. **"Off":** Turns off the "Film Mode" feature. ✍ • If the image contains irregular signals or too much noise, "Film Mode" is automatically turned off even if "Auto" is selected.
Advanced Settings	Customises the Picture function in more detail. **"Reset":** Resets all the advanced settings to the factory settings. **"Adv. Contrast Enhancer":** Automatically adjusts "Backlight" and "Contrast" to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images scenes, and will increase the contrast distinction of the darker picture scenes. **"Black Corrector":** Enhances black areas of the picture for stronger contrast. **"Gamma":** Adjusts the balance between bright and dark areas of the picture. **"Clear White":** Emphasises white colours. **"Live Colour":** Makes colours more vivid.

✍
• "Advanced Settings" is not available when "Picture Mode" is set to "Vivid" or for USB (Video) input.

Sound

Sound Mode	Selects the sound mode. **"Dynamic":** Intensifies clarity and sound presence for better intelligibility and musical realism. **"Standard":** Enhances clarity, detail, and sound presence. **"Clear Voice":** Makes voice sound clearer.
Reset	Resets all the "Sound" settings to the factory settings.
Equalizer	Adjusts sound frequency settings. Press ⇦/⇨ to select the desired sound frequency, then press ⇧/⇩ to adjust the setting and press ⊕. The adjusted settings will be received when you select "Sound Mode" options. Selecting "Reset" will set the "Equalizer" to original settings. ✍ • Adjusting higher frequency will affect higher pitched sound and adjusting lower frequency will affect lower pitched sound.
Balance	Emphasises left or right speaker balance.
Auto Volume	Keeps a constant volume level even when volume level gaps occur (e.g., adverts tend to be louder than programmes).
Volume Offset	Sets an independent volume level to each equipment connected to the TV.

Surround	Selects the surround mode. **"On":** Delivers surround effects that help you enjoy the virtual two-ch surround audio with just the two internal TV speakers. **"Simulated Stereo":** Adds a surround-like effect to mono programmes. **"Cinema":** Delivers surround effects just like the high-grade audio systems found in movie theatres. **"Music":** Delivers surround effects that make you feel like you are surrounded by sound as in a music hall. **"Sports":** Delivers surround effects that make you feel like you are watching a live sports contest. **"Game":** Delivers surround effects that enhance game sound. **"Off":** For normal stereo or mono reception. ✍ • "Surround" is set depending on "Scene Select" settings.
Bass Booster	Produces a fuller sound for more impact, by emphasising the bass sounds.
Dual Sound	Selects the sound from the speaker for a stereo or bilingual broadcast. **"Stereo"**, **"Mono":** For a stereo broadcast. **"A"/"B"/"Mono":** For a bilingual broadcast, select "A" for sound channel 1, "B" for sound channel 2, or "Mono" for a mono channel, if available. 💡 • If you select other equipment connected to the TV, set "Dual Sound" to "Stereo", "A" or "B".
Speakers	Turns on/off the TV's internal speakers. **"TV Speakers":** The TV speakers are turned on in order to listen to the TV's sound through the TV speakers. **"Audio System":** The TV speakers are turned off in order to listen to the TV's sound only through your external audio equipment connected to the audio output sockets.
Audio Out	**"Variable":** When using an external audio system, volume output from audio out can be controlled using the TV's remote. **"Fixed":** The audio output of the TV is fixed. Use your audio receiver's volume control to adjust the volume (and other audio settings) through your audio system.
Headphone Speaker Link	Switches the TV's internal speakers on/off when you connect headphones to the TV.
Headphone Volume	Adjusts the volume of the headphones.
HDMI/DVI Audio Source	Switches the audio signal for HDMI input when a DVI device is connected. Select from "Auto", "HDMI Audio" and "PC Audio".
Advanced Settings	**"Dynamic Range":** Compensates for differences in the audio level between different channels (only for Dolby Digital audio). ✍ • The effect may not function or may vary depending on the programme regardless of the "Dynamic Range" setting. **"Optical Out":** Sets the audio signal that is output from the DIGITAL AUDIO OUT (OPTICAL) jack of the TV. Set to "Auto", when connecting equipment compatible with Dolby Digital. Set to "PCM", when connecting equipment not compatible with Dolby Digital. **"Downmix Mode":** Set the downmix method of multi-channel to two-channel sound. • "Surround": Select to get best surround performance, or while using external products with Pro Logic. • "Stereo": Select to get a stereo output.

Continued

Karaoke	**“Karaoke”:** Selects the karaoke mode, “On” or “Off”. **“Key Change”:** Changes the key of music. The key can be adjusted by semitone steps. **“Vocal Reducer”:** Reduces the volume of the vocal part in the music. The effectiveness of function depends on the music type. **“Mic1 Volume/Mic2 Volume”:** Adjusts the volume of Microphone 1 and 2.

✍
- “Sound Mode”, “Reset”, “Equalizer”, “Balance”, “Auto Volume”, “Volume Offset”, “Surround”, “Bass Booster” and “Karaoke” are not available when “Speakers” is set to “Audio System”.

Screen

Screen Format	Changes the screen format. For details about the screen format, see page 15.
Screen Format (only in PC mode)	**“Normal”:** Displays the picture in its original size. **“Full 1”:** Enlarges the picture to fill the vertical display area, while maintaining its original proportion. **“Full 2”:** Enlarges the picture to fill the display area.
Auto Format	**“On”:** Select “On” to automatically change “Screen Format” setting based on the content. **“Off”:** If frequent screen changes are disturbing to you, select “Off”. Choose one of the “Screen Format” options when this function is set to “Off”.
4:3 Default	Sets the default screen format for 4:3 broadcasts.
Auto Display Area	**“On”:** Automatically adjusts the display area based upon the content. **“Off”:** Turns off the “Auto Display Area”. Choose one from the “Display Area” options.
Display Area	Adjusts the picture display area. **“Full Pixel”:** Displays pictures in their original size when parts of the picture are cut off. **“Normal”:** Displays pictures in their recommended size. **“+1”:** Displays pictures in their original size. **“-1”:** Enlarges the picture so that the edges are outside the visible display area. ✍ • These options may change depending on the input displayed.
Horizontal Shift	Adjusts the horizontal position of the picture.
Vertical Shift	Adjusts the vertical position of the picture when “Screen Format” is set to “Zoom”, “14:9” or “Captions”.
Vertical Size	Adjusts the vertical size of the picture when “Screen Format” is set to “Wide Zoom”.

PC Adjustment

Customises the TV screen as a PC monitor.

- This option is only available if a PC signal is received.
- "Auto Adjustment" may not work well with certain input signals. In such cases, manually adjust "Phase", "Pitch", "Horizontal Shift", and "Vertical Shift".

"Screen Format": Select "Normal" to display in the original image size. Select "Full 1" to enlarge the picture to fill the display area, keeping its original aspect ratio. Select "Full 2" to enlarge the picture to fill the display area.
"Reset": Resets all the "PC Adjustment" except "Screen Format" to the factory settings.
"Auto Adjustment": Automatically adjusts the display position, and phase of the picture in PC mode.
"Phase": Adjusts the screen when a part of a displayed text or image is not clear.
"Pitch": Enlarges or shrinks the screen size horizontally.
"Horizontal Shift": Moves the screen to the left or to the right.
"Vertical Shift": Moves the screen up or down.

Channel Set-up

Analogue Set-up

"Analogue Auto Tuning" (Only in analogue mode): Tunes in all the available analogue channels. Usually you do not need to do this operation because the channels are already tuned when the TV was first installed. However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).
"Manual Programme Preset" (Only in analogue mode): Changes the available analogue channel setting.
Press ⊕ to select the programme you want to modify.

System

Presets programme channels manually.

1 Press ⇧/⇩ to select "System", then press ⊕ .
2 Press ⇧/⇩ to select one of the following TV broadcast systems, then press ⊕ .
B/G: For western European countries/regions
I: For the United Kingdom
D/K: For eastern European countries/regions
L: For France

- Depending on the country/region selected for "Country", this option may not be available.

Channel

1 Press ⇧/⇩ to select "Channel", then press ⊕ .
2 Press ⇧/⇩ to select "S" (for cable channels) or "C" (for terrestrial channels), then press ⇨.
3 Tune the channels as follows:

If you do not know the channel number (frequency)

Press ⇧/⇩ to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press ⇧/⇩.

If you know the channel number (frequency)

Press the number buttons to enter the channel number of the broadcast you want or your VCR channel number.

4 Press ⊕ to jump to "Confirm", then press ⊕ .

Repeat the procedure above to preset other channels manually.

Continued

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel.

AFT

Allows you to fine-tune the selected programme number manually if you feel that a slight tuning adjustment will improve the picture quality.

Audio Filter

Improves the sound for individual channels in the case of distortion in mono broadcasts. Sometimes a non-standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono programmes.
If you do not experience any sound distortion, we recommend that you leave this option set to the factory setting “Off”.

✍

- “Audio Filter” is not available when “System” is set to “L”.

Skip

Skips unused analogue channels when you press PROG**/CH +/-** to select channels. (You can still select a skipped channel using the number buttons.)

Confirm

Saves changes made to the “Manual Programme Preset” settings.

“Programme Sorting” (Only in analogue mode): Changes the order in which the analogue channels are stored on the TV.

1 Press ⇧/⇩ to select the channel you want to move to a new position, then press ⇨.

2 Press ⇧/⇩ to select the new position for your channel, then press ⊕ .

Digital Set-up

“Digital Tuning”

- **“Digital Auto Tuning”:**
  Tunes in the available digital channels.
  This option allows you to retune the TV after moving house, or to search for new channels that have been launched by broadcasters. Press ⊕.
- **“Programme List Edit”:**
  Removes any unwanted digital channels stored on the TV, and changes the order of the digital channels stored on the TV.

1 Press ⇧/⇩ to select the channel you want to remove or move to a new position.
  Press the number buttons to enter the known three-digit programme number of the broadcast you want.

2 Remove or change the order of the digital channels as follows:

To remove the digital channel

Press ⊕. After a confirmation message appears, press ⇦ to select “Yes”, then press ⊕.

To change the order of the digital channels

Press ⇨, then press ⇧/⇩ to select the new position for the channel and press ⇦.

3 Press **RETURN**.

✍

- When “Cable” is selected this function may not be available in some countries.
- **“Digital Manual Tuning”:**
  Tunes the digital channels manually.

1 Press the number button to select the channel number you want to manually tune, then press ⇧/⇩ to tune the channel.

2 When the available channels are found, press ⊕ to store programmes.
  Repeat the above procedure to manually tune other channels.

✍

- Not available for Cable connection.

"Subtitle Set-up"

- **"Subtitle Setting":** When "For Hard Of Hearing" is selected, some visual aids may also be displayed with the subtitles (if TV channels broadcast such information).
- **"Primary Preferred Language":** Selects preferred language which subtitles are displayed in.
- **"Secondary Preferred Language":** Selects secondary preferred language which subtitles are displayed in.

"Audio Set-up"

- **"Audio Type":** Switches to broadcast for the hearing impaired when "For Hard Of Hearing" is selected.
- **"Primary Preferred Language":** Selects the preferred language used for a programme. Some digital channels may broadcast several audio languages for a programme.
- **"Secondary Preferred Language":** Selects the secondary preferred language used for a programme. Some digital channels may broadcast several audio languages for a programme.
- **"Audio Description":** Provides audio description (narration) of visual information if TV channels broadcast such information.
- **"Mixing Level":** Adjusts the TV main audio and Audio Description output levels.

- This option is only available when "Audio Description" is set to "On".

- **"MPEG Audio Level":** Adjusts the MPEG audio sound level.

"Technical Set-up"

- **"Auto Service Update":** Enables the TV to detect and store new digital services as they become available.
- **"System Update":** This TV set is capable of receiving software upgrades via the broadcast signal. In order to receive upgrades the System Update option in the Technical Setup menu should be set to "On". When an upgrade is detected the user will be informed by a series of on screen displays on how to proceed with the upgrade. Please do not disconnect the set from the mains during the installation procedure.
- **"System Information":** Displays the current software version and the signal level.
- **"Time Zone":** Allows you to manually select the time zone you are in, if it is not the same as the default time zone setting for your country/region.

- When "Cable" is selected this function may not be available in some countries.
- **"Auto DST":** Sets whether or not to automatically switch between summer time and winter time.
  - "On": Automatically switches between summer time and winter time according to the calendar.
  - "Off": The time is displayed according to the time difference set by "Time Zone".

- When "Cable" is selected this function may not be available in some countries.
- **"Service Replacement":** Select "On" to automatically change the channel when broadcaster changes transmission of the viewing programme to a different channel.

"CA Module Set-up"

Allows you to access a pay TV service once you obtain a Conditional Access Module (CAM) and a view card. See page 22 for the location of the (PCMCIA) socket.

Parental Lock

Sets an age restriction for programmes. Any programme that exceeds the age restriction can only be watched after a PIN Code is entered correctly.

✍

- For cable operators in Netherlands, the PIN code should be entered when the programme rating is above or equal to the age you specify.

1 Press the number buttons to enter your existing PIN code.
If you have not previously set a PIN, a PIN code entry screen appears. Follow the instructions of "PIN Code" below.

2 Press ⇧/⇩ to select the age restriction or "None" (for unrestricted watching), then press ⊕.

3 Press **RETURN**.

PIN Code	**To set your PIN for the first time** **1** Press the number buttons to enter the new PIN code. **2** Press **RETURN**. **To change your PIN** **1** Press the number buttons to enter your existing PIN code. **2** Press the number buttons to enter the new PIN code. **3** Press **RETURN**. 💡 • PIN code 9999 is always accepted.
Change PIN Code	Selects to change your PIN code.
Parental Lock	Select the age of the youngest viewer (3 ~ 18). Select "None" for no registers. These selectable items may change depending on the country setting.
Digital Programme Lock	Locks/unlocks programmes and checks the status of programmes. **1** Press the number buttons to enter your existing PIN code or to set the new one. **2** Press ⇧/⇩ to navigate across the programmes and press ⊕ to change between "Locked" and "Unlocked" status.
External Input Lock	Locks an external input from being watched. To view a blocked external input, select "Unblocked".

Set-up

USB Auto Start

Automatically enters the thumbnail view of the last played Photo/Music/Video when the TV is turned on and a USB device is connected to the USB port then turned on.

Sleep Timer

Sets a period of time after which the TV automatically switches itself into standby mode.
When the "Sleep Timer" is activated, the ⏲ (Sleep Timer) indicator on the TV front panel lights up in orange.

- When you turn off the TV and turn it on again, "Sleep Timer" is reset to "Off".
- A notification message appears on the screen one minute before the TV switches to standby mode.

Auto Start-up

Starts the initial set-up to select the language, country/region and location, and tune in all available digital and analogue channels. Usually, you do not need to do this operation because the language and country/region will have been selected and channels already tuned when the TV was first installed. However, this option allows you to repeat the process (e.g., to retune the TV after moving house).

Language

Selects the language in which the menus are displayed.

Start-up Sound

Select "On" to play sound when the TV is turned on. Select "Off" to disable it.

AV Set-up

Assigns a name to any equipment connected to the side and rear sockets. The name will be displayed briefly on the screen when the equipment is selected.

1 Press ⇧/⇩ to select the desired input source, then press ⊕ .

2 Press ⇧/⇩ to select the desired option below, then press ⊕ .

- AV1 (or AV2/HDMI1/HDMI2/Component/PC), CABLE, SAT, VCR, DVD/BD, HOME THEATRE, GAME, CAM, DIGITAL CAMERA, PC: Uses one of the preset labels to assign a name to connected equipment.
- "Edit": Creates your own label.

  1 Press ⇧/⇩ to select the desired letter or number ("_" for a blank space), then press ⇨.

  If you input a wrong character

  Press ⇦/⇨ to select the wrong character. Then, press ⇧/⇩ to select the correct character.

  2 Repeat the procedure in step 1 until the name is completed, then press ⊕.

HDMI Set-up

Allows the TV to communicate with equipment that is compatible with the control for HDMI function, and connected to the HDMI sockets of the TV. Note that communication settings must also be made on the connected equipment.
"Control for HDMI": Sets whether or not to link the operations of the TV and the connected equipment that is compatible with control for HDMI.
"Auto Devices Off": When this is set to "On", the connected equipment that is compatible with control for HDMI turns off when you switch the TV to standby mode using the remote.
"Auto TV On": When this is set to "On", the TV turns on when you turn on the connected equipment that is compatible with control for HDMI.
"HDMI Device List": Displays a list of connected equipment that is compatible with control for HDMI.
"Device Control Keys": If it is set to "Tuning Keys", you can select a channel tuned by connected equipment and if it is set to "Menu Keys" you can navigate through the menus of the connected equipment using the remote.

Continued

DivX® VOD	**"DivX® VOD Registration Code":** Displays the registration code that is required to play DivX® VOD content. **"DivX® VOD Deregistration Code":** Displays the deregistration code that is required to play DivX® VOD content.
DVD Settings	**"Downmix":** Switches the method for mixing down to 2 channels when you play a DVD which has Dolby Digital format. • **"Surround":** Multi-channel audio signals are output to 2 channels for enjoying surround sounds. • **"Stereo":** Multi-channel audio signals are downmixed to 2 channels for use with TV speakers or headphones. **"Parental Control Settings":** Films on DVDs may completely or partly not be suitable for children. Such DVDs may contain information that marks the content or scenes with access levels between 1 and 8. You can select one of the access levels and allow alternative scenes to be used during playback. **1** Press ⇧/⇩ to select "Parental Control Settings", then press ⊕. **2** Press ⇧/⇩ to select "PIN code", then press ⊕. **3** Press the number buttons to input the current PIN code. **4** Select "DVD Parental Control", then press ⊕. **5** Press ⇧/⇩ to select the access level, then press ⊕. • **"PIN Code":** Allows you to set up the TV to block DVD content. Use 0-9 on the remote to enter a four-digit PIN code. • **"DVD Parental Control":** Sets a parental guidance level. Select from "Level1" to "Level8" and "No Restrictions". **"DVD Language":** Selects the languages for the on-screen display of the DVD.
USB System Update	Updates the TV system using USB memory.
Product Support	Displays your TV's product information.
Factory Settings	Resets all settings to factory settings. After completing this process, the initial set-up screen is displayed.

Eco

Reset	Resets all the “Eco” settings to the factory settings.
Power Saving	Selects the power saving mode to reduce the power consumption of the TV. **“Standard”:** Default settings. **“Reduce”:** Reduces the power consumption of the TV. **“Picture Off”:** Switches off the picture. You can listen to the sound with the picture off.
Idle TV Standby	Selects the time (“1h”, “2h” or “4h”) to set the TV into standby mode automatically, if you do not operate the TV for the specified period of time.
Light Sensor	Automatically optimises the picture settings according to the ambient light in the room. ✍ • Do not put anything over the sensor, doing so may affect its function. Check the position of the sensor (page 13).
PC Power Management	When this is set to “On,” turns to standby mode if no PC signal is received. Only available in PC input.

✍
- Energy efficiency reduces power consumption and thus saves money by reducing electricity bills.
- When not in use
  - If you will not be using the TV set for several days, the TV set should be disconnected from the mains for environmental and safety reasons.
  - As the TV set is not disconnected from the mains when the TV set is just turned off, pull the plug from the mains to disconnect the TV set completely.
  - However, some TV sets may have features that require the TV set to be left in standby to work correctly.

Installing the Accessories (Wall-Mount Bracket)

To Customers:

For product protection and safety reasons, Sony strongly recommends that installing of your TV be performed by Sony dealers or licensed contractors. Do not attempt to install it yourself.

To Sony Dealers and Contractors:

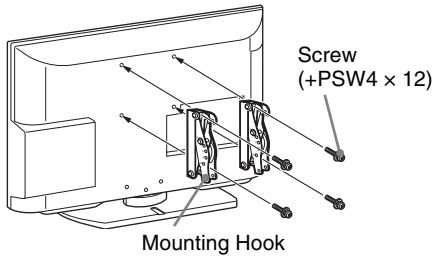
Provide full attention to safety during the installation, periodic maintenance and examination of this product.

Your TV can be installed using the Wall-Mount Bracket SU-WL100 (sold separately).

- Refer to the Instructions supplied with the Wall-Mount Bracket to properly carry out the installation.
- Refer to “Detaching the Table-Top Stand from the TV” (page 7).

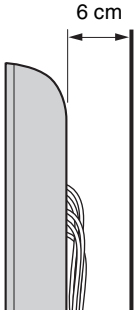
✍
- Place the TV on the Table-Top Stand, when securing the Mounting Hook.

SU-WL100



Note when installing

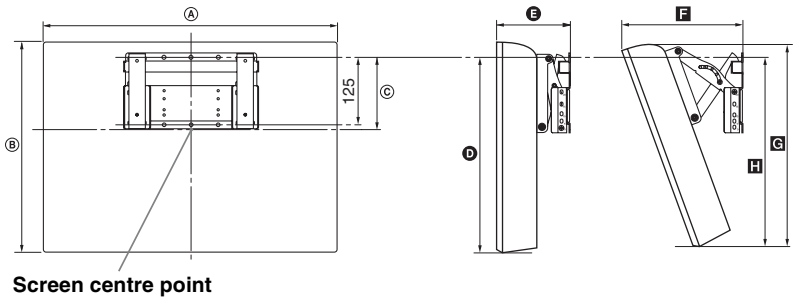
When using the SU-WL100 Wall-Mount Bracket, the space between the wall and the TV will be 6 cm. Use this space to route cables to the TV.



Sufficient expertise is required for installing this product, especially to determine the strength of the wall for withstanding the TV’s weight. Be sure to entrust the attachment of this product to the wall to Sony dealers or licensed contractors and pay adequate attention to safety during the installation. Sony is not liable for any damage or injury caused by mishandling or improper installation.

TV installation dimensions table

SU-WL100



Unit: cm

Model name	Display dimensions		Screen centre dimension	Length for each mounting angle				
				Angle (0°)		Angle (20°)		
	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ
KDL-22CX32D	53.0	34.9	10.2	29.0	12.3	21.1	32.6	28.5

Figures in the above table may differ slightly depending on the installation.

WARNING

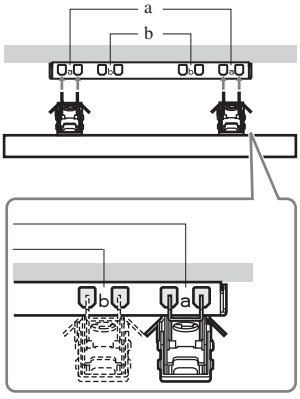
The wall that the TV will be installed on should be capable of supporting a weight of at least four times that of the TV. Refer to “Specifications” (page 42) for its weight.

Screw and Hook locations diagram/table

Model Name	Hook location SU-WL100
KDL-22CX32D	b

Hook location

SU-WL100



Specifications

System	
Panel System	LCD (Liquid Crystal Display) Panel
TV System	Depending on your country/region selection Analogue: B/G, D/K, L, I Digital: DVB-T, DVB-C
Colour/Video System	Analogue: PAL, PAL60 (only video input), SECAM, NTSC3.58, NTSC4.43 (only video input) Digital: MPEG-2 MP@ML/HL, H.264/MPEG-4 AVC HP@L4.0, MP@L4.0
Channel Coverage	Analogue: 46.25 - 855.25 MHz Digital: VHF/UHF
Disc formats	DVD+RW, DVD+R, DVD-RW, DVD-R, CD-RW, CD-R
Media formats	DVD video, audio CD, video CD (VCD 1.0/1.1/2.0), S-Video CD
Sound Output	5W + 5W
Region code	Indicated on the rear of the TV.
Input/Output jacks	
Aerial	75 ohm external terminal for VHF/UHF
/ AV1	21-pin scart connector including audio/video input, RGB input, S-Video input, and TV audio/video output.
COMPONENT IN	Supported formats: 1080p, 1080i, 720p, 576p, 576i, 480p, 480i Y: 1 Vp-p, 75 ohms, 0.3V negative sync/PB/CB: 0.7 Vp-p, 75 ohms/ PR/CR: 0.7 Vp-p, 75 ohms
COMPONENT IN	Audio input (phono jacks)
HDMI IN 1, 2	Video: 1080p, 1080/24p, 1080i, 720p, 576p, 576i, 480p, 480i Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital PC (see page 43) Analogue audio (minijack) (HDMI 1 only)
AV2	Video input (phono jack)
AV2	Audio input (phono jacks)
DIGITAL AUDIO OUT (OPTICAL)	Digital optical jack (Two channel linear PCM, Dolby Digital)
AUDIO OUT	Audio output (Left/Right) (phono jacks)
PC IN	PC Input (15 D-sub) (see page 43) G: 0.7 Vp-p, 75 ohms, non Sync on Green/B: 0.7 Vp-p, 75 ohms/ R: 0.7 Vp-p, 75 ohms, H/V Sync: TTL level PC audio input (minijack)
	Headphones jack
1, 2	Microphone jack
	USB port
	CAM (Conditional Access Module) slot
DVD	DVD Wavelength: 655 ± 15nm Power Max: 0.4mW CD Wavelength: 790 ± 20nm Power Max: 0.4mW

Model name KDL-		22CX32D
Power and others		
Power Requirements		220–240 V AC, 50 Hz
Energy Efficiency Class		C
Screen Size (measured diagonally)		Approx. 54.8 cm / 22 inches
Power consumption	in “Home”/ “Standard” mode	42.0 W
	in “Shop”/ “Vivid” mode	60 W
Average annual energy consumption*1		61 kWh
Standby Power Consumption*2		0.27 W
Off mode Power Consumption		0.26 W
Display Resolution		1,366 dots (horizontal) × 768 lines (vertical)
Dimensions (w × h × d) (Approx.)	(with stand)	53.0 × 38.1 × 19.0 cm
	(without stand)	53.0 × 34.9 × 8.1 cm
Mass (Approx.)	(with stand)	6.4 kg
	(without stand)	5.9 kg
Supplied Accessories		Refer to “1: Checking the accessories” on page 4.
Optional Accessories		See “Installing the Accessories (Wall-Mount Bracket)” on page 40.

*1 Energy consumption per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.

*2 Specified standby power is reached after the TV finishes necessary internal processes.

Design and specifications are subject to change without notice.

PC Input Signal Reference Chart for PC IN and HDMI IN 1/2

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
SVGA	800	600	37.9	60	VESA Guidelines
XGA	1024	768	48.4	60	VESA Guidelines
WXGA	1280	768	47.4	60	VESA
WXGA	1280	768	47.8	60	VESA
WXGA	1360	768	47.7	60	VESA

- This TV’s PC input does not support Sync on Green or Composite Sync.
- This TV’s PC input does not support interlaced signals.
- This TV’s PC input supports signals in the above chart with a 60 Hz vertical frequency.

Troubleshooting

Check whether the ⏻ (standby) indicator is flashing in red.

When it is flashing

The self-diagnosis function is activated.
Press ⏻ on the side of the TV to turn it off, disconnect the mains lead, and inform your dealer or Sony service centre.

When it is not flashing

1 Check the items in the tables below.
2 If the problem still persists, have your TV serviced by qualified service personnel.

- For further information, please contact Sony Customer Information Centre at the address or telephone that appears on the supplied guarantee.

Picture

No picture (screen is dark) and no sound
- Check the aerial/cable connection.
- Connect the TV to the mains, and press ⏻ on the side of the TV.
- If the ⏻ (standby) indicator lights up in red, press I/⏻.

No picture or no menu information from equipment connected to the scart connector
- Press ⇥ to display the connected equipment list, then select the desired input.
- Check the connection between the optional equipment and the TV.

Double images or ghosting
- Check the aerial/cable connection.
- Check the aerial location and direction.

Only snow and noise appear on the screen
- Check if the aerial is broken or bent.
- Check if the aerial has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).

Picture or sound noise when viewing a TV channel
- Adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 34).

Some tiny black points and/or bright points appear on the screen
- The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.

No colour on programmes
- Select "Reset" (page 29).

No colour or irregular colour when viewing a signal from the COMPONENT IN sockets
- Check the connection of the COMPONENT IN sockets and check if each sockets are firmly seated in their respective sockets.

Sound

No sound, but good picture
- Press + or (Mute).
- Check if the "Speakers" is set to "TV Speakers" (page 31).
- When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not output audio signals.

Channels

The desired channel cannot be selected
- Switch between digital and analogue mode and select the desired digital/analogue channel.

Some channels are blank
- Scrambled/Subscription only channel. Subscribe to the pay TV service.
- Channel is used only for data (no picture or sound).
- Contact the broadcaster for transmission details.

Digital channels are not displayed
- Contact a local installer to find out if digital transmissions are provided in your area.
- Upgrade to a higher gain aerial.

General

The TV turns off automatically (the TV enters standby mode)
- Check if the "Sleep Timer" (page 37) or "Idle TV Standby" (page 39) is activated.
- If no signal is received and no operation is performed in the TV mode for 15 minutes, the TV automatically switches to standby mode.

Distorted picture and/or sound
- Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers or optical equipment.
- When installing optional equipment, leave some space between the optional equipment and the TV.
- Check the aerial/cable connection.
- Keep the aerial/cable TV cable away from other connecting cables.

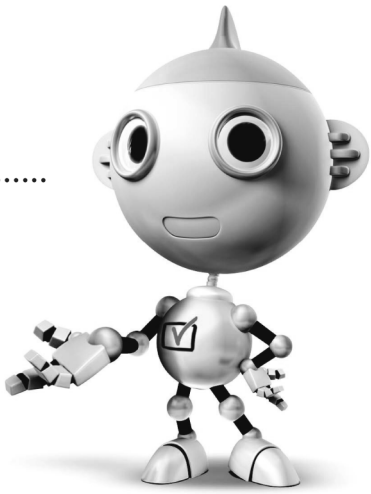
The remote does not function
- Replace the batteries.

HDMI equipment does not appear on "HDMI Device List"
- Check that your equipment is compatible with control for HDMI.

If "Store Display Mode: On" is displayed on the screen
- Your TV is set to "Shop" mode. You need to set "Home" for "Location" in the "Auto Start-up" procedure again (page 6).

Keep this important information about how to re-tune your TV during the digital TV switchover

Keep this Instruction manual safe you'll need it



Television in the UK is going digital, bringing us all more.
Please see overleaf to find out when your area switches to digital.
Digital UK is the independent, non-profit organisation leading the process of digital TV switchover in the UK. Digital UK provides impartial information on what people need to do to prepare for the move to digital, and when they need to do it.

How the switchover affects your TV equipment:

Your new TV has a digital tuner built in, which means it is ready to receive the Freeview signal by simply plugging it into your aerial socket (check if you can get digital TV through your aerial now, or whether you'll have to wait until switchover, at **www.digitaluk.co.uk**).

When the TV switchover happens in your area, there are at least two occasions when you will need to re-tune your TV in order to continue receiving your existing TV channels, and also to pick up new ones. Digital UK, the body leading the digital TV switchover, will advise you when you need to re-tune during the switchover.

How to re-tune:

1 Press **"HOME"** on the remote

2 Press ⇧/⇩ to select "Settings", then press ⊕

3 Press ⇧/⇩ to select "Channel Set-up", then press ⊕.

4 Press ⇧/⇩ to select "Digital Set-up", then press ⊕

5 Press ⊕ to select "Digital Tuning"

6 Press ⊕ to select "Digital Auto Tuning"

7 Press ⇦ to select "OK" then press ⊕ to start "Digital Auto Tuning"

8 Follow the on screen instructions.

If you are missing any channels, it may be that they are not available in your area, or that your aerial needs upgrading.

If you have any questions, please contact Sony on **0844 8466555** or call Digital UK on **0845 6 50 50 50** or visit **www.digitaluk.co.uk**

When does switchover happen?
*Copeland switches on October 17, 2007
Shetland Islands
STV North 2010
STV Central 2010/11
Border 2008/09
Tyne Tees 2012
Ulster 2012
Yorkshire 2011
Granada 2009
Wales 2009/10
Central 2011
Anglia 2011
London 2012
West 2010
Meridian 2012
West Country 2009
The exact date you switch depends on the transmitter you are served by. To check when you switch, go to Digital UK's postcode checker on www.digitaluk.co.uk
Check your ITV news service or look at Teletext page 106 to see what TV region you're in.
Visit us at digitaluk.co.uk call us on 0845 6 50 50 50†

†Calls charged at BT rate of 3p per minute daytime and 1p per minute evenings and weekends. Rates may vary for calls from non-BT lines.

For useful information about Sony products

http://www.sony-europe.com/myproduct/

4-270-482-**11**(1)

http://www.sony.net/

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